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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/432,338	11/02/99	ZIMMERMANN	K 10191/1157

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EXAMINER

KEASEL, E

ART UNIT

PAPER NUMBER

3754

DATE MAILED:

06/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/432,338

Applicant(s)

Zimmermann et al.

Examiner

Eric Keasel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 24, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 24 May 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/432,338 is acceptable and a CPA has been established. An action on the CPA follows.

Specification

2. The amendment filed 27 April 2001 (and requested to be entered with the filing of the CPA) is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: US Patent Number 6,097,585 can not be incorporated by reference at this time. The present application was filed on 2 Nov 1999. The patent that was issued on 1 Aug 2000 was not part of the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The second step of claim 1 (“determining a switching instant...”) has not been described in the specification in any detail. The only explanations of this step are on page 4 with nonenabling phrases such as “This break is usually detected by current analysis” on line 12 and “the time curve of the current is analyzed to determine the switching time” on lines 24 and 25. The disclosure is simply inadequate for such an essential step (one of only two steps in claim 1). It appears that one of the major purposes for this invention is to provide a sufficient time window between t_3 and t_4 such that the switching instant can be identified. It is absolutely critical to the invention to know what this current analysis is and how long it takes in order to determine the sufficiency of the time window.

The “means for determining a switching instant” of claim 7 is also not enabling. This is an apparatus claim and no apparatus is identified by the disclosure for determining a switching instant.

The “means for determining a duration of a time window” is also not enabling. Only the algorithm of Fig. 3 appears to be associated with determining a duration of a time window. This is an apparatus claim and an algorithm is not an apparatus.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The construction of the method claims renders them indefinite. It appears that claims 2-4 describe the iterative process of Fig. 3. However, this is no iteration of these steps as the claims are written. Furthermore, the steps of claims 2-4 appear to be what is meant by the first step in claim 1. If this is the case, claims 2-4 collectively would appear to be a double inclusion of claim 1, step 1; or, claims 2-4 individually could be considered as partially repeating claim 1, step 1.

Also, claim 5 appears to be (at least partially) what is meant by claim 1, step 2. Claim 5 is dependent on claim 1; are the steps of claim 5 intended to be additional steps occurring after the two steps of claim 1? If so, why is the second step of claim 1 partially repeated?

7. In light of the above informalities, the claims have been examined as could best be understood by the examiner. The examiner's failure to apply prior art to any of the claims should not be construed as an indication of allowable subject matter.

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-7 (as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzelmann et al.

As can be best be understood by the examiner, Heinzelmann et al. disclose the same invention (albeit from a voltage standpoint rather than the current standpoint of the present application). Note the similarities of the algorithm of bottom of Fig.2 of Heinzelmann with Fig. 3 of the application. There are also large portions of the disclosure of Heinzelmann copied into the present application. The only apparent differences are in the voltage perspective of

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Heinzelmann versus the current perspective of applicant. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Heinzelmann (given in a voltage perspective) to that of applicant (given in a current perspective) as the relationship between voltage and current is a well known law of nature.

Response to Arguments

10. Applicant's arguments filed 16 Jan 2001 have been fully considered but they are not persuasive.

Applicant argues that the structure associated with the claim terminology is clear and enabling. The examiner disagrees. Applicant contends that Fig. 1 is sufficient to describe the apparatus of the "means for determining" (it should be noted that applicant does not specify which means Fig. 1 is supposed to represent). Fig. 1 only shows the consumer, a switch, a current measuring device, and a "control unit". The consumer is what is being activated and the switch (or, more specifically, the time that it opens or closes) is what is being determined. Neither appear to be either (or perhaps both) of the "means for determining". The current measuring device is only an input into either (or both) of the "means for determining". Applicant is left with a black box (ref no. 130) in Fig. 1 to describe his entire apparatus. This simply is not enabling.

Applicant also argues that the use of the word "switching instant" in the specification renders the means for determining the switching instant definite and enabled. The examiner

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disagrees. There is no confusion as to whether a switching instant exists. It is an inherent property of all consumers. What is indefinite and not enabled is how it is being determined (i.e. the means for determining the switching instant).

The mere construction of the method claims renders claims 2-6 indefinite. Where are these steps supposed to fit in with the two steps of claim 1?

Applicant argues that MPEP 2173.02 allows more latitude in claim language than the examiner has given. The examiner disagrees. No one reading the present disclosure and claims would be aware of what is covered by the claims. All of the arguments applicant has set forth regarding the definitiveness of the claim language (within the present disclosure) does not address the claim language in question. Applicant then tries to argue that enablement and definiteness are met because a prior art reference (under 35 USC 102(e)) uses similar terms in a rather dubious patent issued in 2000. This document was not available to anyone as the filing date of the present application and can not be used to satisfy the statutory requirements of 35 USC 112 1st and 2nd paragraphs; however, it is only prior art under 35 USC 102(e) for art rejections.

Applicant argues that the reference used in the art rejection (Heinzelmann et al. ('585)) is a totally different invention. The examiner disagrees. Compare, for example, the first claim of ('585) with claim 1 of the instant application. The step "determining a switching instant" is the same. '585 treats the time window as an inherent property (which it is, there must be some time window) which has an adaptable set point (i.e. a duration which is determined). The two steps of

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claim 1 of the instant application is the same invention with the exception of voltage rather than current.

Conclusion

11. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

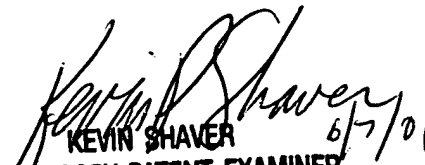
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver, can be reached on (703) 308-2582. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

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June 6, 2001


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6/7/01